

## REMARKS

Claims 1-41 stand rejected. Claims 1-41 remain pending in the patent application. Applicants respectfully request further examination and reconsideration in view of the remarks set forth below. Applicants respectfully submit that the amendments herein to the patent application do not add new matter to it.

### Telephone Conference

On January 5, 2005, Examiner Thomas H. Stevens and the attorney for Applicants, Thomas M. Catale, discussed the new matter objection of the present Office Action.

### Information Disclosure Statement

The first Office Action mailed April 5, 2004, alleges: "The listing of references on pages 1-2 in the specification is not a proper information disclosure statement." Applicants respectfully submit that an information disclosure statement is filed concurrently with the present response.

### New Matter Objection

The present Office Action alleges: "The amendment filed 8/10/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure." At issue is the amended paragraph of the specification beginning on page 19, line 25, and ending on page 20, line 8. Applicants respectfully point out that the amendments to this

paragraph involved deleting " $S_1, \dots, S_n$ " and inserting in place thereof " $S_1, \dots, S_m$ " so that the specification corresponds with Figure 8. Therefore, Applicants respectfully submit that the amendment received by the U.S. Patent and Trademark Office on August 10, 2004, does not add new matter to the patent application.

### 35 U.S.C. §102 Rejections

Claims 1-12 and 14-41 are rejected under 35 U.S.C. §102(e) as being anticipated by Schlansker et al., US Patent Number 6,408,428 (hereinafter Schlansker).

#### CLAIM 1

Applicants respectfully contend that Schlansker fails to teach subject matter as recited within independent Claim 1. For instance, Claim 1 recites in part (emphasis added):

forming a Cartesian product of the component Pareto sets to obtain a set of system designs.

To the extent that Schlansker may mention Pareto set and Cartesian product, Applicants respectfully assert that Schlansker fails to teach the combination of forming a Cartesian product of the component Pareto sets to obtain a set of system designs as recited in Claim 1. Since Schlansker does not teach at least one element recited in Claim 1, Applicants respectfully contend that Schlansker cannot anticipate Claim 1. Therefore, Applicants respectfully submit that Claim 1 is allowable over Schlansker.

### CLAIM 6

Applicants respectfully contend that Schlansker does not teach subject matter as recited within independent Claim 6. For instance, Claim 6 recites in part (emphasis added):

applying a system quality filter to the Cartesian product of the component validity sets to produce a Pareto set.

To the extent that Schlansker may mention Pareto set and Cartesian product, Applicants respectfully assert that Schlansker fails to teach the combination of applying a system quality filter to the Cartesian product of the component validity sets to produce a Pareto set as recited in Claim 6. Since Schlansker does not teach at least one element recited in Claim 6, Applicants respectfully assert that Schlansker cannot anticipate Claim 6. Therefore, Applicants respectfully submit that Claim 6 is allowable over Schlansker.

### CLAIM 14

Applicants respectfully contend that Schlansker does not teach subject matter as recited within independent Claim 14. For instance, Claim 14 recites in part (emphasis added):

forming a set of system designs that is a Cartesian product of the component Pareto sets.

To the extent that Schlansker may mention Pareto set and Cartesian product, Applicants respectfully assert that Schlansker fails to teach the combination of forming a

set of system designs that is a Cartesian product of the component Pareto sets as recited in Claim 14. Since Schlansker does not teach at least one element recited in Claim 14, Applicants respectfully contend that Schlansker cannot anticipate Claim 14. Therefore, Applicants respectfully submit that Claim 14 is allowable over Schlansker.

#### CLAIM 21

Applicants respectfully contend that Schlansker does not teach subject matter as recited within independent Claim 21. For instance, Claim 21 recites in part (emphasis added):

applying a quality filter to the system designs of the partial validity sets to produce respective partial Pareto sets; and  
combining the partial Pareto sets to form a Pareto set.

To the extent that Schlansker may mention Pareto set, Applicants respectfully assert that Schlansker fails to teach applying a quality filter to the system designs of the partial validity sets to produce respective partial Pareto sets as recited in Claim 21. For example, Applicants respectfully contend that Schlansker is silent on producing respective partial Pareto sets. Furthermore, Applicants respectfully contend that Schlansker does not teach combining the partial Pareto sets to form a Pareto set as recited in Claim 21. Since Schlansker does not teach at least one element recited in Claim 21, Applicants respectfully assert that Schlansker cannot anticipate Claim 21. Therefore, Applicants respectfully submit that Claim 21 is allowable over Schlansker.

### CLAIM 24

Applicants respectfully contend that Schlansker does not teach subject matter as recited within independent Claim 24. For instance, Claim 24 recites in part (emphasis added):

applying a quality filter to the system designs of the partial validity sets, the quality filter comparing and selecting system designs based on the evaluation metrics and producing respective partial Pareto sets; and  
combining the partial Pareto sets to form a first Pareto set.

To the extent that Schlansker may mention Pareto set, Applicants respectfully assert that Schlansker fails to teach applying a quality filter to the system designs of the partial validity sets, the quality filter comparing and selecting system designs based on the evaluation metrics and producing respective partial Pareto sets as recited in Claim 24. For example, Applicants respectfully contend that Schlansker is silent on producing respective partial Pareto sets. Additionally, Applicants respectfully contend that Schlansker does not teach combining the partial Pareto sets to form a first Pareto set as recited in Claim 24. Since Schlansker does not teach at least one element recited in Claim 24, Applicants respectfully assert that Schlansker cannot anticipate Claim 24. Therefore, Applicants respectfully submit that Claim 24 is allowable over Schlansker.

### CLAIM 31

Applicants respectfully contend that Schlansker does not teach subject matter as recited in amended independent Claim 31. For instance, amended Claim 31 recites in part (emphasis added):

preparing component Pareto curves for the components;  
preparing a combined Pareto curve from the component Pareto curves;

Applicants respectfully assert that Schlansker fails to teach preparing component Pareto curves for the components as recited in amended Claim 31. Specifically, Applicants respectfully contend that Schlansker is silent on Pareto curves. Moreover, Applicants respectfully contend that Schlansker does not teach preparing a combined Pareto curve from the component Pareto curves as recited in amended Claim 31. Since Schlansker fails to teach at least one element recited in amended Claim 31, Applicants respectfully assert that Schlansker cannot anticipate amended Claim 31. Therefore, Applicants respectfully submit that amended Claim 31 is allowable over Schlansker.

### CLAIM 32

Applicants respectfully contend that Schlansker fails to teach subject matter as recited in amended independent Claim 32. For instance, amended Claim 32 recites in part (emphasis added):

preparing a component Pareto curve for a cache memory;  
preparing a combined Pareto curve from the component Pareto curves of the processor and the cache memory;

Applicants respectfully assert that Schlansker fails to teach preparing a component Pareto curve for a cache memory as recited in amended Claim 32. Specifically, Applicants respectfully contend that Schlansker is silent on Pareto curves. Furthermore, Applicants respectfully assert that Schlansker does not teach preparing a combined Pareto curve from the component Pareto curves of the processor and the cache

memory as recited in amended Claim 32. Since Schlansker fails to teach at least one element recited in amended Claim 32, Applicants respectfully assert that Schlansker cannot anticipate amended Claim 32. Therefore, Applicants respectfully submit that amended Claim 32 is allowable over Schlansker.

#### CLAIMS 33, 35, and 36

Based on rationale similar to that discussed above with reference to independent Claim 1, Applicants respectfully assert that independent Claims 33, 35, and 36 are not anticipated by Schlansker. Therefore, Applicants respectfully submit that independent Claims 33, 35, and 36 are allowable over Schlansker.

#### 35 U.S.C. §103 Rejections

Claims 13 is rejected under 35 U.S.C. §103(a) as being unpatentable by Schlansker in view of Jacome et al., "Lower Bound on Latency for VLIW ASIP Datapaths", IEEE (1999).

#### CLAIM 13

Applicants respectfully assert that Claim 13 is allowable since it depends from independent Claim 6 that is allowable based on rationale discussed above.

CONCLUSION

In light of the above listed remarks, Applicants respectfully request reconsideration of rejected Claims 1-41.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present application.

Respectfully submitted,

Wagner, Murabito & Hao LLP

Dated: FEB. 27, 2005

A handwritten signature in black ink, appearing to read 'Thomas M. Catale', written over a horizontal line.

Thomas M. Catale  
Registration No.: 46,434

Wagner, Murabito & Hao LLP  
Two North Market St., Third Floor  
San Jose, CA 95113

Voice: (408) 938-9060  
Facsimile: (408) 938-9069